

EXHIBIT 1

LISTING OF CLAIMS:

1. A medical device for use in treating a human patient, comprising:
a metal alloy substrate having an average grain size in the range of one to ten microns.
9. The device of claim 1, wherein the substrate is a titanium based alloy.
14. The device of claim 1, wherein the medical device is a stent.
15. The device of claim 14, wherein the stent is configured with a plurality of struts having a thickness, such that the number of grains across a strut thickness is in the range of five to fifteen.
16. The device of claim 14, wherein the stent is configured with a plurality of elongate elements having a thickness, such that the average number of grains across an element thickness is more than six.
22. An intravascular stent for use in a body lumen, comprising:
a plurality of cylindrical rings interconnected to form the stent, each cylindrical ring having a first delivery diameter and a second expanded diameter; and
each cylindrical ring being formed from a fine grained material having an average grain size of one to ten microns.
26. The intravascular stent of claim 22, further comprising at least one straight link attaching each cylindrical ring to an adjacent cylindrical ring.
27. The intravascular stent of claim 22, further comprising at least one undulating link attaching each cylindrical ring to an adjacent cylindrical ring.
28. The intravascular stent of claim 22, further comprising at least one undulating link attaching a first cylindrical ring to a first adjacent cylindrical ring, and at least one straight link attaching a second cylindrical ring to a second adjacent cylindrical ring.
29. The intravascular stent of claim 22, wherein each cylindrical ring includes a proximal end, a distal end and a cylindrical wall extending circumferentially between the proximal end and the distal end, and further including an undulating link positioned substantially within the cylindrical wall of a first cylindrical ring so as to attach the first cylindrical ring to an adjacent cylindrical ring.

41. A stent comprising a substrate having an average grain size in the range of one to ten microns.

42. The stent of claim 41, wherein the stent is configured with a plurality of struts having a thickness, such that the number of grains across a strut thickness is in the range of five to fifteen.

43. The stent of claim 41, wherein the stent is configured with a plurality of elongate elements having a thickness, such that the average number of grains across an element thickness is more than six.

44. The stent of claim 41, wherein the substrate is a metal selected from the group consisting of titanium and tantalum.

45. The stent of claim 41, wherein the substrate is a metal alloy selected from the group consisting of stainless steel alloys, cobalt-chromium alloys, nickel-titanium alloys, platinum-iridium alloys, titanium based alloys and tantalum based alloys.